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| 10/699,906 | 11/03/2003 | Jason Harold Culler | 200310793-1 | 4393 |

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EXAMINER

NGUYEN, MINH T

ART UNIT PAPER NUMBER

2816

DATE MAILED: 07/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/699,906

Applicant(s)

CULLER, JASON HAROLD

Examiner

Minh Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 May 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 and 22-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7, 8, 10-12, 14, 15, 17-20, 23-25, 27, 28 and 30 is/are rejected.
- 7) ☒ Claim(s) 6, 9, 13, 16, 22, 26 and 29 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. Applicant's amendment filed on 5/5/05 has been received and entered in the case. The amendment and argument presented therein overcome the informality objections, indefiniteness rejections and prior art rejections noted in the previous Office action, therefore, these are withdrawn. New grounds of rejections necessitated by the amendment are set forth below. This action is FINAL.

Specification

2. The disclosure is objected to because of the following informalities: the brief description of Fig. 8 should be inserted in the Brief Description of the Drawing section, i.e., page 3, after line 3. It should not be in page 1 as proposed by the amendment. Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2, 4-5, 7-8, 10-12, 14-15, 17-20, 23-25, 27-28 and 30 are rejected under 35

U.S.C. 102(b) as being anticipated by US Patent No. 5,923,715, issued to Ono.

As per claim 1, Ono discloses a system (figure 1), comprising:

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an input that receives a synchronization signal having a frequency (the input which receives the reference clock signal F1); and

an oscillator/control system (the combination of circuit blocks 11, ..., 17) that provides a clock signal having a frequency (the digital PLL output clock signal), the oscillator/control system adjusts the clock signal by one of switching in and out at least one component in the path of the clock signal based on a comparison the frequency for the synchronization signal and the frequency for the clock signal (the result from the frequency comparator 11 is fed to the delay stage control 13 for generating control signals ES1-ESS, these signals are used to control the variable delay circuit 16. In figure 2, these control signals are used to control the multiplexer 20 to switch in/out delay elements 23, ..., 24).

As per claim 2, Ono further discloses:

a first sampling system (figure 4A, the counter 41) that provides a digital indication (10 bits indication) of the frequency for the synchronization signal; and

a second sampling system (figure 4A, the counter 42) that provides a digital indication (10 bits indication) of the frequency for the clock signal (the clock signal F2), the oscillator/control system adjusting the clock signal based on a comparison between the indication of frequency for the clock signal and the indication of the frequency for the synchronization signal (this is merely a function of a DLL).

As per claim 4, the recited comparator reads on the comparison unit 43 shown in figure 4A. The recited function is discussed in claim 1.

As per claim 5, the recited phase detector and phase adjuster read on the phase comparator 14 and adder/subtracter 15 shown in figure 1, respectively.

As per claim 7, the recited update control reads on the up/down counter 81 for generating the control signals E'N shown in figure 4C.

As per claim 8, the recited limitation which is the operating characteristics of an integrated circuit chip comprising the system is treated as an intended use of the system because the integrated circuit chip is not further limit the claimed subject matter of claim 1. Accordingly, no patentable weight is given to the recited intended use.

As per claims 10-11, these claims are rejected for the same reason noted in claim 8.

As per claim 12, this claim is rejected for the same reasons noted in claims 1, 2 and 4.

Further, the recited controller reads on the delay stage control 13.

As per claim 14, this claim is rejected for the same reason noted in claim 4.

As per claim 15, this claim is rejected for the same reason noted in claim 5.

As per claim 17, this claim is rejected for the same reason noted in claim 7.

As per claim 18, the recited means for comparing the frequency reads on comparison unit 43 shown in 4A, the recited means for controlling oscillating means reads on the circuits 12 and 13, the recited means for comparing phase reads on the phase comparator 14, and the recited means for adjusting phase reads on the circuit 15 shown in figure 1.

As per claim 19, the recited oscillating means reads on the variable delay circuit 16.

As per claim 20, this claim is rejected for the same reason noted in claim 2.

As per claim 23, this claim is rejected for the same reason noted in claim 7.

As per claim 24, this claim is merely a method to operate a system having the structure discussed in claim 1. Since Ono teaches the system, he inherently teaches the recited method.

As per claim 25, this claim is rejected for the same reason noted in claim 2.

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As per claim 27, this claim is rejected for the same reason noted in claim 4.

As per claim 28, this claim is rejected for the same reason noted in claim 5.

As per claim 30, this claim is rejected for the same reason noted in claim 7.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No.

5,923,715, issued to Ono.

Ono discloses a system having structure discussed in claim 2 herein above wherein the synchronization signal is sampled by the counter 41 and the clock signal is sampled by the counter 42 but he does not explicitly disclose a specific sampling rate which is at least four times that of the synchronization signal as called for in the claim.

However, it has been held by the court that when general condition is met, it is not inventive by merely adjusting a parameter in a circuit to achieve an optimum result for a certain condition.

It would have been obvious to one skilled in the art at the time of the invention was made to adjust the sampling rate in the Ono's system to have a rate that is at least four times that of the synchronization signal.

The motivation and/or suggestion would be to meet the requirement of a certain application which requires the removing of certain noise components so that the Ono's system can be used in such an application.

Response to Arguments

5. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Allowable Subject Matter

6. Claims 6, 9, 13, 16, 22, 26 and 29 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 6 is allowable because the prior art of record fails to disclose or suggest the inclusion of an insertion loss compensator in the system.

Claim 9 is allowable because the prior art of record fails to disclose or suggest the inclusion of delay network in at least one of the first and second sampling systems.

Claim 13 is allowable because the prior art of record fails to disclose or suggest the inclusion of delay network in at least one of the first and second sampling systems.

Claims 16, 22, 26 and 29 are allowable for the same reasons noted in claim 6, 6, 13 and 6, respectively.

Conclusion

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7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

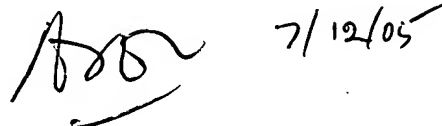
8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh Nguyen whose telephone number is **571-272-1748**. The examiner can normally be reached on Monday, Tuesday, Thursday, Friday 7:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Callahan can be reached on 571-272-1740. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

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system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature, possibly reading 'Minh', is written in black ink. To the right of the signature, the date '7/12/05' is handwritten.

Minh Nguyen
Primary Examiner
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